

**WEST**
 

L29: Entry 2 of 3

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**TITLE:** Olefin! graft copolymers prodn. useful as thermoplastic elastomer or polyolefin-type compatibilising agent - by polymerising olefin monomer(s), olefinic monomer(s) in presence of catalysts contg. TM cpd(s), and e.g. aluminoxane(s) to form ionic complexes then polymerising with olefin monomer(s)

**PATENT-ASSIGNEE:** IDEMITSU KOSAN CO LTD (IDEK)

**PRIORITY-DATA:** 1992JP-0062318 (March 18, 1992)

**PATENT-FAMILY:**

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 05262817 A	October 12, 1993		017	C08F004/642
JP 3233225 B2	November 26, 2001		019	C08F255/02

**APPLICATION-DATA:**

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP 05262817A	March 18, 1992	1992JP-0062318	
JP 3233225B2	March 18, 1992	1992JP-0062318	
JP 3233225B2		JP 5262817	Previous Publ.

**INT-CL (IPC):** C08F 4/64; C08F 4/642; C08F 4/654; C08F 255/02

**ABSTRACTED-PUB-NO:** JP 05262817A

**BASIC-ABSTRACT:**

Prodn. of olefin graft copolymers comprise polymerising (A) at least one olefin monomer and (B) at least 2 polymerisable carbon to carbon double bond-contg. monomers in the presence of (C) catalysts contg. (a) transition metal cpds. and (b) at least one cpd. selected from (1) organic metal cpds., (2) aluminoxanes, (3) halogen-contg. organic cpds. and (4) cpds. reacting with (a) to form ionic complexes, and polymerising (D) at least one olefin monomer with the obtd. copolymers in the presence of (C).

Pref. (B) contain double bonds having different reactivities. The graft copolymers contain 10power-4 to 20 mole % of (B).

**USE/ADVANTAGE** - The graft copolymers are useful as thermoplastic elastomers, polyolefin-type compatibiliser and polyolefins having improved mouldability, mechanical, optical and thermal properties. They have variously controlled stereospecificity, copolymerisation reactivity and copolymerisation compsn. They are produced efficiently.

In an example, ethylene/octene-1/p-(3-buteneyl)styrene (PBS) copolymer was produced from 30g of octene-1, 20 mmoles of PBS, 3 mmoles of triisobutylaluminium, 12 micromoles of tri n-butylammonium tetra(pentafluorophenyl)borate, 24 micromoles of dicyclopentadienyl zirconium dichloride and 6kg of ethylene. 15g of octene-1, 15 micromoles of Ti catalyst component were added to the copolymerisation system. The

system was heated to 95deg.C. 1.5 kg of H<sub>2</sub> was introduced into the system and 6kg/cm<sup>2</sup> of ethylene were fed to the system and polymerised for 20 minutes. The polymerisation temp. reached 115deg.C. The system was cooled and pressure-removed. 130g of a copolymer were obtd. It had a MI of 8.5 g/10 mins. at 250deg.C.

ABSTRACTED-PUB-NO: JP 05262817A

EQUIVALENT-ABSTRACTS:

CHOOSEN-DRAWING: Dwg.0/0

DERWENT-CLASS: A17

CPI-CODES: A02-A06; A04-G01A; A06-D; A10-C03; A12-W11K;